1/1 - (C) WPI / DERWENT
AN - 2002-269525 [31]
AP - EP20010984565 20010117; WO2001US01384 20010117; [Based on WO0218412]
; AU20010029503 20010117
PR - US20010259516P 20010104; US20000228086P 20000828
TI - Seventeen nucleic acid molecules encoding human secreted proteins, useful in the prevention, treatment and diagnosis of cancer, immune disorders, cardiovascular disorders and neurological diseases
IW - SEVENTEEN NUCLEIC ACID MOLECULAR ENCODE HUMAN SECRETION PROTEIN USEFUL PREVENT TREAT DIAGNOSE CANCER IMMUNE DISORDER CARDIOVASCULAR DISORDER NEUROLOGICAL DISEASE
PA - (HUMA-N) HUMAN GENOME SCI INC
PN - EP1317472 A1 20030611 DW200346 C07H21/04 Eng 000pp
- WO0218412A1 20020307 DW200231 C07H21/04 Eng 501pp
- AU200129503 A 20020313 DW200249 C07H21/04 000pp
IC - C07H5/00 ; C07H21/02 ; C07H21/04 ; C07K14/00 ; C12N1/21 ; C12N15/63 ; C12N15/85 ; C12N15/86 ; C12Q1/68
AB - WO200218412 NOVELTY - Seventeen nucleic acid molecules encoding human secreted proteins, are new.
- DETAILED DESCRIPTION - Seventeen nucleic acid molecules encoding human secreted proteins, are new.
- Each nucleic acid molecule (S1) comprises a sequence which is at least 95% identical to a sequence selected from:
- (a) a polynucleotide fragment of one of the 49 nucleotide sequences (N1) defined in the specification, or a polynucleotide fragment of the cDNA sequence (C1) included in one of the ATCC Deposit Nos. defined in the specification, where C1 is hybridizable to a nucleotide sequence selected from N1;
- (b) a polynucleotide encoding a polypeptide fragment, domain or epitope of one of the 49 polypeptide sequences (P1) defined in the specification, or a polypeptide fragment, domain or epitope encoded by C1;
- (c) C1 or a polynucleotide encoding a polypeptide selected from P1;
- (d) a polynucleotide which is a variant, preferably allelic variant, of a sequence selected from N1;
- (e) a polynucleotide which encodes a species homolog of a sequence selected from P1; or
- (f) a polynucleotide capable of hybridizing under stringent conditions to any of the polynucleotides of (a) to (e), where the polynucleotide does not hybridize under stringent conditions to a nucleic acid having a sequence of only A or T residues.
- INDEPENDENT CLAIMS are also included for the following:
- (1) a recombinant vector comprising S1;
- (2) a method of making a recombinant host cell comprising S1;
- (3) a recombinant host cell, comprising vector sequences, produced by the method of (2);
- (4) an isolated polypeptide (P2), comprising an amino acid sequence at least 95% identical to a sequence selected from:
- (a) a polypeptide fragment, domain or epitope of a sequence selected from P1 or from the sequence encoded by C1, where the polypeptide fragment may have biological activity;
- (b) a secreted form of a protein selected from P1 or from the sequence

encoded by C1;
- (c) a full length protein selected from P1 or from the sequence encoded by C1;
- (d) a variant, preferably allelic variant, of a sequence selected from P1; or
- (e) a species homologue of a sequence selected from P1;
- (5) an isolated antibody that specifically binds to P2;
- (6) a recombinant host cell that expresses P2;
- (7) a method of making a polypeptide, comprising culturing the recombinant host cell of (6);
- (8) the polypeptide produced by the method of (7);
- (9) a method of preventing, treating or ameliorating a medical condition, comprising administering P2 or S1;
- (10) a method of diagnosing a pathological condition or a susceptibility to a pathological condition, comprising:
- (a) determining the presence or absence of a mutation in S1; and
- (b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or absence of the mutation;
- (11) a method of diagnosing a pathological condition or a susceptibility to a pathological condition, comprising:
- (a) determining the presence or amount of expression of P2 in a biological sample; and
- (b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or amount of expression of the polypeptide;
- (12) a method of identifying a binding partner to P2, comprising:
- (a) contacting P2 with a binding partner; and
- (b) determining whether the binding partner effects an activity of the polypeptide;
- (13) the gene corresponding to a cDNA sequence encoding a polypeptide selected from P1;
- (14) a method of identifying an activity in a biological assay, comprising:
- (a) expressing a sequence selected from S1 in a cell;
- (b) isolating the supernatant;
- (c) detecting an activity in a biological assay; and
- (d) identifying the protein in the supernatant having the activity; and
- (15) the product produced by the method of (14).
- ACTIVITY - Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral; antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer; vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic; cardiant.
- Chick chorioallantoic membrane (CAM) is a well-established system to examine angiogenesis. Blood vessel formation on CAM is easily visible and quantifiable. The ability of the polypeptides to stimulate angiogenesis in CAM can be examined.
- Fertilized eggs of the White Leghorn chick (Gallus gallus) and the Japanese quail (Coturnix coturnix) are incubated at 37.8 degrees Centigrade and 80% humidity. Differentiated CAM of 16-day-old chick and 13-day-old quail embryos is studied with the following methods. On Day 4 of development, a window is made into the egg shell of chick

eggs. The embryos are checked for normal development and the eggs sealed with cellotape. They are further incubated until Day 13. Thermanox coverslips are cut into disks of about 5 mm in diameter. Sterile and salt-free growth factors are dissolved in distilled water and about 3.3 mg/5 ml are pipetted on the disks. After air-drying, the inverted disks are applied on CAM. After 3 days, the specimens are fixed in 3% glutaraldehyde and 2% formaldehyde and rinsed in 0.12 M sodium cacodylate buffer. They are photographed with a stereo microscope (Wild M8) and embedded for semi- and ultrathin sectioning as described above. Controls are performed with carrier disks alone.

- MECHANISM OF ACTION - Gene therapy.
- USE - The polynucleotides and polypeptides are useful for preventing, treating or ameliorating a medical condition (claimed) in e.g. humans, mice, rabbits, goats, horses, cats, dogs, chickens or sheep.
- The polypeptides can also be used as a food additive or preservative to increase or decrease storage capabilities.
- The polynucleotide are useful for chromosome identification. The nucleic acids, protein, antibodies, agonists and antagonists are useful in the diagnosis, treatment and prevention of:
- (a) cancer, particularly breast and ovarian cancer, and other cancers of the adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver, lung, or urogenital;
- (b) immune disorders such as Addison's disease, allergies, autoimmune hemolytic anemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid arthritis and ulcerative colitis;
- (c) cardiovascular disorders such as myocardial ischemias;
- (d) wound healing;
- (e) neurological diseases such as cerebral anoxia and epilepsy; and
- (f) infectious diseases such as viral, bacterial, fungal and parasitic infections.
- Numerous examples of each type of disorder are given in the specification.
- (Dwg.0/0)

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN ***402537-39-7*** REGISTRY
CN DNA (human clone HTPIY88 305-amino acid secretory protein cDNA plus flanks) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 47: PN: WO0218412 SEQID: 52 claimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 1837
NA 481 a 476 c 447 g 433 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2002018412 claimed SEQID 52

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MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN ***402537-11-5*** REGISTRY
CN DNA (human clone HTPIY88 43-amino acid secretory peptide cDNA plus flanks) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 23: PN: WO0218412 SEQID: 24 claimed DNA
FS NUCLEIC ACID SEQUENCE
SQL 1872
NA 482 a 484 c 458 g 439 t 1 k 2 n 4 w 2 y

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
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MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

(402537-39-7) DNA (human clone HTPIY88 305-amino acid secretory protein cDNA plus flanks)
Length = 1837 Score = 2698 Expect = 0.0

Score = 2698 Expect = 0.0
Identities = 1367/1369 (99%)
Strand = Plus / Plus

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(402537-11-5) DNA (human clone HTPIY88 43-amino acid secretory peptide cDNA plus flanks)
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Score = 2670 Expect = 0.0
Identities = 1360/1369 (99%)
Strand = Plus / Plus

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